Installation & User Guide

vaddio

ControlVIEW Xtreme™

Pan/Tilt/Zoom Enhanced Camera Control System

|	
Introduction	The ControlVIEW Xtreme is the most advanced camera controller for automating preset positioning. The ControlVIEW Xtreme controls up to four VISCA compatible Pan-Tilt-Zoom (PTZ) cameras, and positions them to various preset locations when triggered by external devices, such as TouchVIEW, MicVIEW, AutoVIEW, and third-party gated microphone mixers.
Unpacking the ControlVIEW Xtreme	Carefully remove the device and part of the packing material: Set the unit on a flat, solid surface, unpack and identify the following parts: • One Power Supply • One Power cord • Two 12-Position 5mm terminal connectors • Two 2-Position 5mm terminal connectors • Two Rack Ears • Four Screws • One IR Remote Control • Two AAA Batteries
ControlVIEW Front Panel	
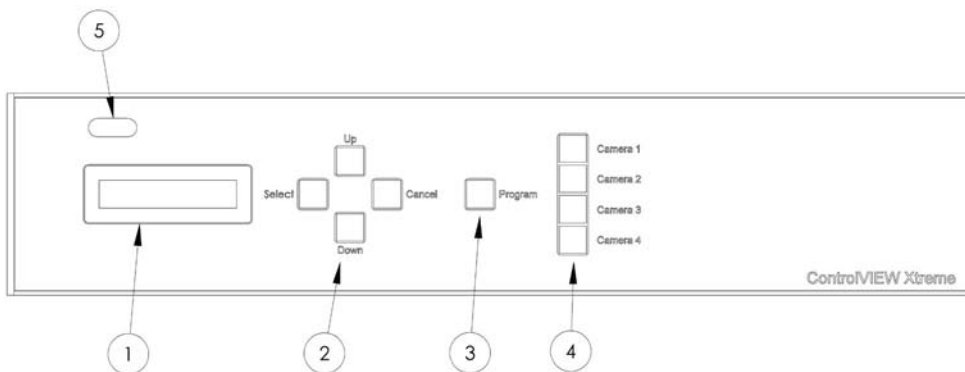
(1) LCD screen   Indicates system status.
(2) Menu Control   Execute Menu options.
(3) Program button   Toggles Program Mode.
(4) Camera Selection Buttons   Choose from one of four cameras.
(5) IR Window   IR Receiver for remote operation

ControlVIEW Back Panel
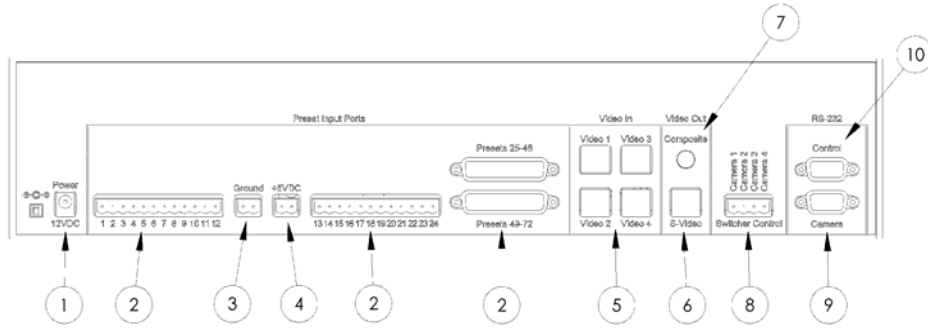
(1) Power Port   Connection for Power
(2) Preset input ports   Connection to triggering device(s).
(3) Ground   Ground for connecting triggering device(s).
(4) +5VDC   Output with 5VDC
(5) S-video inputs   Video Inputs from Cameras(s).
(6) S-video output   Video Output to display/distribution system.
(7) Composite video out   Video Output to display/distribution system
(8) Switcher Control   Output for Controlling External Video Switcher
(9) RS-232 output   Serial Connection to Camera(s).
(10) RS-232 input   Serial Connection from Control System.

IR Remote Control
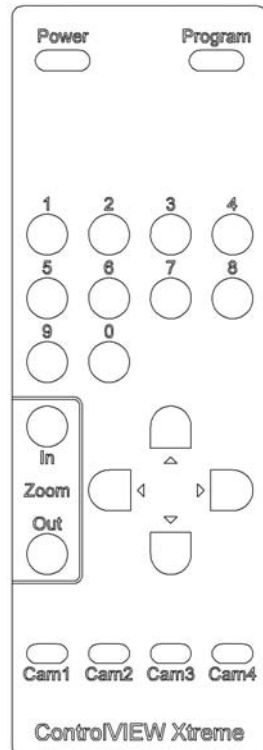
Power	Toggle Power for All Cameras and ControlVIEW Xtreme
Program	Toggle Program Mode
0-9	Used for Recalling Presets, or Storing Presets when in Program Mode
Zoom In Zoom Out	Zooms Active Camera In/Out
Up Down Left Right	Move Active Camera
Cam1 Cam2 Cam3 Cam4	Select between connected cameras.

Setup	The standard setup consists of a ControlVIEW Xtreme and one, two, three, or four VISCA compatible PTZ cameras and an external triggering device. In this configuration, the system will provide up to four cameras with total of 72 preset positions. Any preset can be stored to any camera.

1. Connect the *Camera* port of the ControlVIEW Xtreme to the RS-232 input of the first camera. If more cameras are to be used connect them together in a daisy chain by connecting RS-232 out of Camera One to RS-232 In of camera two. Repeat for additional cameras.
2. When applicable, connect the *Control* port on the ControlVIEW Xtreme to an available serial port on a control system (i.e., Crestron, AMX).
3. Connect a wire between the port labeled *Ground* on the ControlVIEW Xtreme and a ground port on any/all external triggering devices (i.e. MicVIEW, TouchVIEW, AutoVIEW).
4. Connect the contact closure output pins or the voltage activated output pins of the triggering device to the *Preset Input* pins of the ControlVIEW Xtreme. (See Appendix B for Pinout diagram for ControlVIEW Xtreme).
5. Using an S-video cable, connect the video output from camera one to the video input for camera one on the ControlVIEW Xtreme. Repeat this step for additional cameras where necessary.

Note: The ControlVIEW Xtreme ONLY supports S-Video input. For people with other needs, there is an external video switch controller. See Appendix B for pin out.

6. Connect the S-Video and/or Composite Video out on the ControlVIEW Xtreme to the video input on a display device (i.e. monitor, CODEC, or AV distribution).

Note: The ControlVIEW Xtreme outputs BOTH S-Video and composite video simultaneously.

7. Power up all cameras.

Note: If any of the cameras become disconnected from the daisy-chain or lose power, it will be necessary to reset the ControlVIEW Xtreme to re-establish the camera link. Presets will NOT be lost since presets are stored in non-volatile memory on the ControlVIEW Xtreme.

8. Power up any/all external triggering devices (MicVIEW, AutoVIEW, TouchVIEW, etc.)
9. Make sure all external triggering systems are not attempting to trigger the ControlVIEW Xtreme.
10. Power up the ControlVIEW Xtreme.

Note: All triggering devices must be idle and not attempting to trigger the

ControlVIEW Xtreme during boot up. During the startup sequence, the ControlVIEW Xtreme scans its input ports and considers this state idle. When the pins change state, the ControlVIEW Xtreme recognizes that as a trigger.

Configuration

There are several user controlled settings that may be adjusted to accommodate a variety of specific user needs and environments. Using the *Up* and *Down* buttons, choose one of the following options and press 'SELECT'

Default Preset

Default preset is the preset location where the ControlVIEW Xtreme goes after a specified period of inactivity. Presets can be selected from 0 – 72, and the *Default Timer* must be set to presets 1-72. *Preset 0* allows the user to choose a *Default Camera* (See below). This could be used for a switching to a presenter's camera without specifying an exact location. The time duration for the period of inactivity is chosen by *Default Timer* (See below).

1. Using the Menu Control buttons, Press *UP* or *DOWN* until the arrow, points to *Default Preset.*
2. Press *Select*
3. Press *Up* or *Down* arrow to point to the preset number desired.
4. Press Select.

Note: Setting Default Preset to 0 makes the ControlVIEW Xtreme switch to a default camera without moving it. The Camera default setting is also a separate option to choose which camera will be selected. It is recommended to set the Default Timer when setting the Default Preset.

Default Timer

This sets the period of time for users who wish the ControlVIEW Xtreme to go to a specific preset or switch to a different camera after a period of inactivity. The time period can be selected from 0-60 seconds. Setting Default Timer to 0 turns off this feature, and does not make the camera change or move during periods of inactivity.

1. Using the Menu Control buttons, Press *UP* or *DOWN* until the arrow, points to *Default Preset.*
2. Press *Select.*
3. Press *Up* or *Down* arrow to point to the time (in seconds) desired.
4. Press *Select.*

Note: When setting this to a specific preset, it is recommended to set the Default Timer when setting the Default Preset. Setting Default Timer to 0 turns off the time delay features. The ControlVIEW Xtreme will not switch cameras or move presets until a new trigger is detected.

Default Camera

For users who wish the ControlVIEW Xtreme to switch to a specific camera without moving to a specific preset. This sets which camera to use as default. In order t make this feature work, Default Preset must be set to 0, and the Default Timer must be set to 1-60 seconds.

1. Using the Menu Control buttons, Press *UP* or *DOWN* until the arrow, points to *Default Camera.*
2. Press *Select.*

3. Press *Up* or *Down* arrow to point to the camera number desired.
4. Press *Select*.

Note: Only cameras attached and detected on the serial port can be selected. Cameras that are not connected to the ControlVIEW Xtreme Camera Port, or not connected to the daisy-chain will not be supported.

Pan Speed

For users who wish the ControlVIEW Xtreme to adjust the speed at which the system moves from Preset to Preset. This adjusts the pan speed.
1. Using the Menu Control buttons, Press *UP* or *DOWN* until the arrow, points to *Pan Speed.*
2. Press *Select.*
3. Press *Up* or *Down* arrow to point to the speed desired. (Higher numbers are faster)
4. Press *Select.*

Note: The Pan Speed only affects the speed of moving from preset to preset. Manual control using the ControlVIEW Xtreme remote is not controlled by this setting.

Tilt Speed

For users who wish the ControlVIEW Xtreme to adjust the speed at which the system moves from Preset to Preset. This adjusts the tilt speed.
1. Using the Menu Control buttons, Press *UP* or *DOWN* until the arrow, points to *Tilt Speed.*
2. Press *Select.*
3. Press *Up* or *Down* arrow to point to the speed desired. (Higher numbers are faster)
4. Press *Select.*

Note: The Tilt Speed only affects the speed of moving from preset to preset. Manual control using the ControlVIEW Xtreme remote is not controlled by this setting.

Active Serial

This setting only applies to users who wish to use the ControlVIEW Xtreme with an external control system or joystick.
1. Using the Menu Control buttons, Press *UP* or *DOWN* until the arrow, points to *Serial Port.*
2. Press *Select.*
3. Press *Up* or *Down* arrow to point to the desired Option.
   ON, ControlVIEW functions controllable by Control system.
   OFF, ControlVIEW passes instructions from control system to the cameras.
4. Press *Select.*
5. The system will store the new setting and restart in the new mode.

Note: In *Active Serial* OFF, the instructions from the control system are passed through the ControlVIEW Xtreme to and from the cameras. The functions of the ControlVIEW Xtreme (like presets and video switching) are not controllable from the control system. In Active Serial ON, the ControlVIEW Xtreme itself is controllable from a control system providing all functions like presets and video

switching.

Reset

This option is only used when the ControlVIEW Xtreme needs to reboot. Reboot the system when new cameras or triggering devices are connected or disconnected.
1. Using the Menu Control buttons, Press *UP* or *DOWN* until the arrow, points to *Reset*
2. Press *Select.*

Clear Memory

This option is only used to erase all system presets and return the ControlVIEW Xtreme to factory defaults.
1. Using the Menu Control buttons, Press *UP* or *DOWN* until the arrow, points to *Clear Memory.*
2. Press *Select*
3. Press *Up* or *Down* arrow to point to the desired Option.
   1 – Erase
   0 – Cancel
4. Press Select.

Joystick Priority

This option allows the RMBR-300 to take control of the ControlVIEW Xtreme. Presets are disabled, and the video switcher is controlled by the joystick. In order to operate fully, the *Serial Active* mode must first be set to OFF. The custom cable must be connected to the Joystick and the DB25 port for presets 49-72.

1. Using the Menu Control buttons, Press *UP* or *DOWN* until the arrow, points to *Jstik Priority.*
2. Press *Select*
3. Press *Up* or *Down* arrow to point to the desired Option (ON, OFF)
4. Press Select.

Operation

Programming presets

1. If the LED on the program button is off, briefly press the *PROGRAM BUTTON* on the front of the ControlVIEW Xtreme or remote control unit. The LED on the front of ControlVIEW Xtreme should indicate that the system is now in program mode.
2. Using the buttons on the front panel or the remote control provided with a ControlVIEW Xtreme, select the current camera to view.
3. Move the camera into position using the same remote.
4. Trigger the ControlVIEW Xtreme using one of the external devices. Please reference the owner's manual or user guide provided with your external triggering device or microphone mixer.
5. The LCD screen on the front of the ControlVIEW Xtreme should indicate that a preset is being stored. A corresponding number should also be displayed on the front.

6. Repeat steps two through five to store it any or all decided presets for use with the ControlVIEW Xtreme

Recalling Presets

1. If the program light is on briefly press the program button on the front of the ControlVIEW Xtreme and the LED will stop indicating program mode.
2. The ControlVIEW Xtreme is now ready to begin recalling presets when triggered from the external devices. The ControlVIEW Xtreme will indicate when the camera is moving or in the process of changing presets during this time you will not be able to use the remote control to move the camera. The trigger must be released before the next preset can be triggered.

Note: Presets are stored inside the ControlVIEW Xtreme. The ControlVIEW Xtreme will remember all of the presets even when the system and cameras are off. The system may be safely powered down using the enclosed remote, or by simply disconnecting power.

Control system users

For users with an external control system, the ControlVIEW Xtreme has been designed with an instruction set to maximize control and minimize complexity. To use the ControlVIEW Xtreme with such devices, the RS 232 protocol must be set to 9600 bps and data bits, 8N1, no parity and no flow control.

See appendix for all ControlVIEW Xtreme API instruction protocols.

There is no control system equivalent for Program Mode. To program a preset, send the code 'Store xx' where xx is a preset number between 1 and 72. To recall a preset, send the code 'Preset xx' where xx is a preset number between 1 and 72.

The ControlVIEW Xtreme can also be used in the serial pass through mode. In this mode, the control system can communicate directly with the cameras and completely bypass the ControlVIEW Xtreme.

Troubleshooting	**The camera does not respond to the ControlVIEW extreme**	• Check power to the ControlVIEW extreme • Check power to the camera(s). • Check the connection of the serial cables between camera one and the ControlVIEW Xtreme. • Check all serial connections of all cameras in the daisy chain. • Confirm that the ControlVIEW Xtreme is not in program mode. • Confirm that no triggering device is trying to hold the ControlVIEW Xtreme at a preset • Reset the ControlVIEW extreme • Check to see that Joystick Priority is OFF
	The camera does not respond to serial instructions from control device passing through with the ControlVIEW extreme	• Confirm this serial port on the control device is set to 9600 bps, 8N1, no parity, and no flow control. • Check all serial connections to the camera. • Confirm that serial port on the ControlVIEW Xtreme is set to Active Serial OFF.
	The internal video switcher does not switch	• The ControlVIEW Xtreme scans the serial port for attached cameras. If a camera is not detected, the video switcher will not switch to that source. Ensure the camera is connected and operating correctly and reset the ControlVIEW Xtreme • Check to see if the system is in *Joystick Priority Mode.* In this mode, only the joystick can switch the video. If a joystick is not connected, turn off *Joystick Priority Mode*. • Make sure the cables connecting each of the cameras together in the daisy chain are correctly pinned according to Camera manufacturer's instructions.

APPENDIX A, ControlVIEW Xtreme API protocol

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+------------------------------------------------------------------------+
|                       Vaddio ControlVIEW Xtreme                        |
|             v1.50 Copyright 2004 Photo Control Corporation             |
+------------------------------------------------------------------------+
| ?          - This menu          SetDefault xx   - Set Default Preset   |
| Camera x   - Switch to Camera xx TimeDelay xx   - Set Default Timer    |
| Preset xx  - Move to Preset xx   Move xxxxx     - Move (Up, Down, Stop |
| Zoom  xxxx - Zoom In/OUT                                  Left, Right) |
| Store xx   - Store preset xx     Pass           - Pass 1 VISCA cmd     |
| Keypad xx  - Turn on/off keypad  DefaultCam xx  - Set Default Camera   |
| Reset      - Reset ControlVIEW X Config         - List Config settings |
| Poling xx  - Turn polling on/off PanSpeed xx    - Set Pan Speed        |
| ClearAll   - Erase all presets   TiltSpeed xx   - Set Tilt Speed       |
+------------------------------------------------------------------------+
```
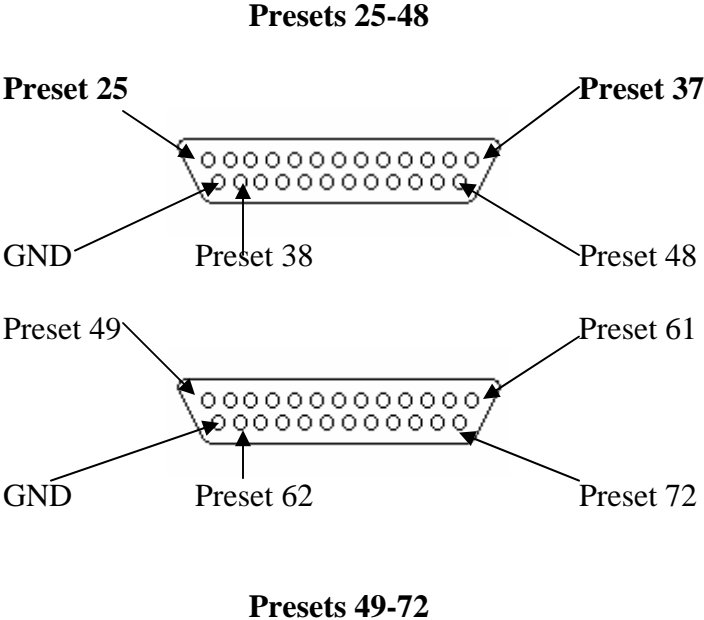
In order to control the ControlVIEW Xtreme, the Active Serial mode must be ON. Control Codes are not case sensitive. All commands must terminate with a carriage return (CR).

Command	Description
CAMERA X	Switch active camera and video source to Camera x, where X = 1,2,3, or 4.
PRESET XX	Move to Preset XX, where XX is between 1 and 72.
ZOOM XXXX	Zoom Active Camera, where XXX = IN, OUT, STOP.
STORE XX	Store current camera and position to Preset XX, where XX is between 1 and 72.
KEYPAD XX	Allows the Control System to activate or reactivate the keyboard on the front panel of the ControlVIEW Xtreme. XX = ON or OFF
RESET	Resets the ControlVIEW Xtreme while remembering all presets.
POLING XX	Enables and Disables the ControlVIEW Xtreme from scanning for triggering devices (polling is deliberately misspelled).
SETDEFAULT XX	Sets the default Preset, where XX is between 0 and 72. Setting XX to 0, sets default camera without a position. (see, DEFAULTCAM below)
TIMEDELAY XX	Sets the period of time of inactivity before moving to Default Preset. X is between 0 and 59 Seconds. To turn off the Time delay, set XX = 0.
MOVE XXXXX	Instructs the ControlVIEW Xtreme to move the currently selected camera. XXXXX = Up, Down, Left, Right or Stop
DEFAULTCAM X	Sets the default Camera to view after a period of inactivity. For this function to work, TIMEDELAY must be greater than 0, and SetDefault must be equal to 0.
PANSPEED XX	Sets the Pan Speed (Left/Right) of the Camera as it moves from Preset to Preset. This does not affect the Move instruction or the Pan/Tilt keys on the IR remote.
TILTSPEED XX	Sets the Tilt Speed (Up/Down) of the Camera as it moves from Preset to Preset. This does not affect the Move instruction or

	the Pan/Tilt keys on the IR remote.
CLEARALL	Erases all preset information.
?	Directs the ControlVIEW Xtreme to send the menu shown above to host.
PASS	Sending the PASS instruction followed by a CR then followed by a camera instruction passes the camera instruction to the camera. Feedback from the camera is not provided.

Appendix B, ControlVIEW Xtreme Port Pin Configuration

(Rear view of ControlVIEW Xtreme)

Presets 25-48

Preset 25   **Preset 37**

GND   Preset 38   Preset 48

Preset 49   Preset 61

GND   Preset 62   Preset 72

Presets 49-72

Technical specifications

Serial Communication	9600bps, 8N1, No Flow Control.
Video input	4x S-Video
Video output	1x S- video
	1x Composite video
Preset port input	2x 12 Conductor, 5mm
	2x DB25
Ground Port	1x 2 Conductor, 5mm
	1x 2 Conductor, 5mm
Switcher Control	1x 4 Conductor, 5mm
Weight	4.6lbs (2.08 kg)
Depth	6.25" (15.9 cm)
Width	15.75" (42.6 cm)
Height	3.5" (8.81 cm)
Power Supply	12VDC, 1.25A Output
	100-240VAC, 50-60 Hz Input

Care and cleaning
- Do not attempt take this device apart. There are no user serviceable parts inside
- Keep this device away from food and liquid
- To clean the exterior wipe with a damp cloth. Do not use abrasive chemicals

Operating in storage conditions
Do not store or operate this device under the following conditions:
- At temperature above 104°F (40°C) or below 32°F or (0°C).
- Environments with high humidity
- Dusty environments
- Inclement weather
- Severe vibration

Declaration of Conformity
In accordance with ISO/IEC Guide 22 and BS 7514:

Manufacturer's Name:	Vaddio
Manufacturer's Address:	4800 Quebec Ave N
	New Hope, MN 55428

This product complies with the requirements of the EMC Directive 89/339/EEC.

Electromagnetic Emissions:	EN 55022: 1998, Class A
Immunity:	EN 55024: 1998
	61000-3-2: 1995
	61000-3-3: 1995

Warranty information on hardware - One year limited warranty in all parts. Vaddio warrants this product against defects in materials and workmanship for a period of one year from the day of purchase if Vaddio receives notice of such defects during the warranty. They will, at its option, repair or replace products which prove to be defective.

Exclusions - The above warranty shall not apply to defects resulting from: improper or inadequate maintenance by the customer, customers applied software or interfacing, unauthorized modifications or misuse, operation outside the normal environmental specifications for the product, use of the incorrect power supply, or improper site operation and maintenance.

Customer service – Vaddio will test, repair, or replace the product or products without charge if the unit is under warranty. If the product is out of warranty, Vaddio will test than repair the product or products for the cost of parts and labor charge will be estimated by a technician and confirmed by the customer prior to repair. All components must be returned to be tested as a complete unit. Vaddio will not accept responsibility for shipment after it has left the premises.

Technical support - Vaddio technicians will determine and discuss with a customer the criteria for repair costs and or replacement contact body as technical support to one of these resources e-mail support at support@vaddio.com or online- at www.vaddio.com.

Return Material Authorization (RMA) number - Before returning a product for repair or replacement request an RMA from Vaddio's technical support. Provide a technician with a return phone number, e-mail address, shipping address, and product serial numbers. Describe the reason for repairs or returns as well as the date of purchase. Include your assigned RMA number in all correspondence with Vaddio. Write your assigned RMA number on the outside of the box when returning the product.

Voided warranty – The warranty does not apply if the original serial number has been removed or if the product has been disassembled or damaged through misuse, accident, modifications, or unauthorized repair.

Shipping and handling - Vaddio will not pay for inbound shipping transportation or insurance charges or accept any responsibility for laws and ordinances from inbound transit body. Vaddio will pay for outbound shipping, transportation, and insurance charges all items under warranty. It will not assume responsibility for loss and/or damage by the outbound freight carrier

Products not under warranty - Payment arrangements are required before outbound shipping for all products that were out of warranty.

Vaddio manufactures its hardware products from parts and components that are new or equivalent to new in accordance with industry standard practices.